



Department of Energy
Washington, DC 20585

MAY 06 2019

Mr. Jason Smathers
10107-67031329@requests.muckrock.com

Re: Freedom of Information Act Request HQ-2019-00060-C

Dear Mr. Smathers:

This is the Department of Energy (DOE), Office of Inspector General (OIG) response to your request No.1250476-000, which you submitted to the Federal Bureau of Investigation (FBI) Record/Information Dissemination Section under the Freedom of Information Act (FOIA) 5 U.S.C. § 552. You requested "The most recent 100 emails to or from the email account IC Complaints@ic.fbi.gov including attachments."

During its search and review of responsive documents, the FBI identified one record that originated with DOE OIG. This document was referred to the OIG for a release determination.

The OIG has completed its review of the responsive document pursuant to the FOIA. Based on this review, the OIG determined that certain material should be withheld pursuant to subsections (b)(6) and b(7)(C) of the FOIA, hereafter referred to as Exemptions 6 and 7(C), respectively.

Exemption 6 protects from disclosure "personnel and medical and similar files the disclosure of which would constitute a clearly unwarranted invasion of personal privacy. . . ." Exemption 7(C) provides that "records or information compiled for law enforcement purposes" may be withheld from disclosure, but only to the extent the production of such documents "could reasonably be expected to constitute an unwarranted invasion of personal privacy. . . ."

Names and information that would tend to disclose the identity of certain individuals have been withheld pursuant to Exemptions 6 and 7(C). Individuals involved in the OIG enforcement matters, which in this case include subjects, witnesses, sources of information, and other individuals, are entitled to privacy protections so that they will be free from harassment, intimidation and other personal intrusions.

In invoking Exemptions 6 and 7(C), we have determined that it is not in the public interest to release the withheld material. In this request, we have determined that the public interest in the identity of individuals who appear in these files does not outweigh these individuals' privacy interests. Those interests include being free from intrusions into their professional and private lives.

For your information, Congress excluded three discrete categories of law enforcement and national security records from the requirements of the FOIA. See 5 U.S.C. 552(c) (2006 & Supp. IV 2010). This response is limited to those records that are subject to the requirements of

the FOIA. This is a standard notification that is given to all our requesters and should not be taken as an indication that excluded records do, or do not, exist.

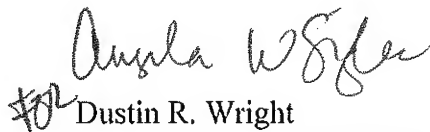
To the extent permitted by law, the DOE, in accordance with Title 10, Code of Federal Regulations (C.F.R.), Section 1004.1, will make available records it is authorized to withhold pursuant to the FOIA unless it determines such disclosure is not in the public interest. As required, all releasable information has been segregated from the material that is withheld and is provided to you. See 10 C.F.R. § 1004.7(b)(3).

This decision may be appealed within 90 calendar days from your receipt of this letter pursuant to 10 C.F.R. 1004.8. Appeals should be addressed to the Director, Office of Hearings and Appeals, HG-1 /L'Enfant Plaza Building, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585-1615 or by email to OHA.filings@hq.doe.gov, including the phrase "Freedom of Information Appeal" in the subject line.

Thereafter, judicial review will be available to you in the Federal district court either 1) in the district where you reside; 2) where you have your principal place of business; 3) where the Department's records are situated, or 4) in the District of Columbia.

If you have any questions about the processing of your request, you may contact our FOIA Public Liaison, Mr. Alexander Morris, by phone at (202) 586-5955 or by email at Alexander.Morris@hq.doe.gov, to discuss any aspect of your request. Please know that you also have the right to seek dispute resolution services from the FOIA Public Liaison or the Office of Government Information Services, <https://ogis.archives.gov>, via telephone (202) 741-5770 // (877) 684-6448 (toll free), by fax: (202) 741-5769 or email ogis@nara.gov.

Sincerely,


Dustin R. Wright
Assistant Inspector General
for Investigations
Office of Inspector General

Enclosure

cc: FBI Records/Information Dissemination Section

DOCUMENT NO. 1



Department of Energy
Washington, DC 20585

March 27, 2013

Mr. Joseph S. Campbell
Chairman
Integrity Committee
Council of the Inspectors General on Integrity and Efficiency
935 Pennsylvania Avenue, NW
Room 3973
Washington, DC 20535-0001

Re: Complaint Relating to Special Report on "The Department of Energy's
Management of the Award of a \$150 Million Recovery Act Grant to LG Chem
Michigan Inc."

Dear Mr. Campbell:

Pursuant to Section 11(d)(4)(C) of the Inspector General Act of 1978, as amended, I am providing at Enclosure 1 correspondence from Mr. [REDACTED] which alleges wrongdoing on the part of the U.S. Department of Energy's Office of Inspector General (OIG). Mr. [REDACTED] concerns relate to our February 8, 2013, Special Report on *The Department of Energy's Management of the Award of a \$150 Million Recovery Act Grant to LG Chem Michigan Inc.* (Enclosure 2).

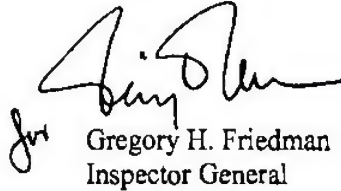
Mr. [REDACTED] alleged that the entire OIG report review chain made an active choice to forgo truth and fact to publish a report containing false statements. He also recommended that I be personally held accountable for arbitrary abuse of power, position and authority.

In response to the issues raised by Mr. [REDACTED], we undertook a thorough and comprehensive review of our work. This included re-referencing the supporting documentation by an independent party unrelated to the original engagement. The results of our review confirm the validity of our findings and conclusions. Thus, I am confident that our work was professional, based on sound analysis, presented objectively, certainly critical of Departmental actions but fair.

For your information and use, Enclosure 3 is a copy of our review work papers. As you will note by examining Enclosure 3, Mr. [REDACTED] considered his complaint to be a "protected communication." Also, I call your attention to the matrix, which is part of the package and which addresses the issues raised by Mr. [REDACTED] on an item by item basis. In the interest of full disclosure, it should be noted that the review did identify one exception where a statement of "one official" was cited as "officials" in the issued report.

In summary, the evidence confirms that the OIG acted in a manner consistent with the highest standards of our profession. However, given the nature of Mr. [REDACTED] comments, I am (b)(6), (b)(7)(C) forwarding the matter to the Integrity Committee for consideration. I would be pleased to answer any questions that you may have.

Sincerely,


for Gregory H. Friedman
Inspector General

Enclosures

(b)(6), (b)(7)(C)

- (1) [REDACTED] – February 13, 2013, Email to OIG
- (2) OIG Special Report on *The Department of Energy's Management of the Award of a \$150 Million Recovery Act Grant to LG Chem Michigan Inc.* (OAS-RA-13-10, February 2013)
- (3) Supporting Documentation Binder

(b)(6), (b)(7)(C)

(b)(6), (b)(7)(C)

From: [REDACTED] (NETL)
Sent: Wednesday, February 13, 2013 10:13 AM
To: IGHOTLINE
Subject: Whistleblower Complaint
Attachments: [REDACTED].vcf

(b)(6), (b)(7)(C)

Follow Up Flag: Follow up
Flag Status: Flagged

Subject: IG Knowingly and Willfully Posts Report Containing False Statements for Viewing By the Public (IG Report OAS-RA-13-10)

References:

(a) Inspector General Special Report, OAS-RA-13-10, "The Department of Energy's Management of the Award of \$150 Million Recovery Act Grant to LG Chem Michigan Inc." dated February 2013 (<http://energy.gov/ig/office-inspector-general>)

(b) Government Audit Standards, 2011 Revision, December 2011

For the Record: This email constitutes protected communications with the Office of the Inspector General and Congressional Representatives. Since the information contained herein addresses false statements and misconduct by individuals within the inspector general's office, I am keenly concerned with reprisal in some form. I am requesting Whistleblower protection. As noted, I am submitting this request for investigation to the Department of Energy Inspector General's office, however the complaint is also against that same office. I will be requesting advice concerning the path forward to ensure my allegations are considered and investigated in a fair and unbiased fashion.

(b)(6), (b)(7)(C)

Background: My name is [REDACTED] and I am employed by the Department of Energy, National Energy Technology Laboratory (NETL), Morgantown, West Virginia. I am the [REDACTED] (b)(6), (b)(7)(C)

(b)(6), (b)(7)(C)

[REDACTED] in support of the Office of Energy Efficiency and Renewable Energy (EERE) Office of Vehicles Technologies.

(b)(6), (b)(7)(C)

My division [REDACTED]

Allegation: The information contained herein provides evidence that the Department of Energy Inspector General's Office knowingly and willfully;

- Created summary statements or quotes from NETL officials that were not representative of fact
- Did not provide the statements back to the responsible NETL officials to verify that the comments were accurately stated
- Ignored requests to correct the NETL summary statements and did not identify that these quotes or summary statements were not concurred upon within the report as required reference (a), paragraph 4.38
- Included summary statements or quotes from LG Chem officials and did not provide the statements back to the responsible LG Chem officials to verify that the comments were accurately stated and did not identify that this process had not occurred within the report
- Created subjective and erroneous audit criteria that is not consistent with laws, regulations, or grant agreements as required within reference (b), paragraph 6.37

- Knowingly and intentionally included materially false and fictitious statements in the subject report
- Knowingly and intentionally posted a report on a public site containing materially false or fictitious facts, incorrect NETL quotes or summary comments, uncoordinated and unverified LG Chem quotes or summary comments, incorrect criteria for project evaluation, resulting in false statements within the Department of Energy via OAS-RA-13-10 (Constituting a false statement)

Report Creates NETL Quotes or Summary Statements That Were Known to be False

(b)(6), (b)(7)(C)

False NETL Summary Statements: There were only three (3) NETL officials interviewed by the IG office representatives, [REDACTED] and am very aware of what the others said in response to questions from the IG. There were several summary statements or quotes that were attributed to NETL officials that were misrepresented within the IG report. These statements were never confirmed with the specific individual who supposedly made the statement and these statements are incorrect when used in the context set forth within the IG report. As a matter of fact the department provided the following comment to the draft IG report that was not mentioned within the final IG report:

"The IG report references several quotes and actions by DOE, EERE, and NETL officials. The majority of these items are not consistent with actual occurrences."

The following statements were attributed to "NETL Officials";

False NETL Statement #1: Report, page 3, "LG Chem Michigan officials made that decision even though demand for the Chevrolet Volt averaged 1,955 vehicles per month in 2012. That volume could have readily been produced by using the then built-out capacity of the Michigan plant. *NETL officials commented that it was anticipated at the time the grant was awarded that the transition of production from non-U.S. sources to Michigan would occur; however, language requiring the shift in production had not been incorporated into the grant. Thus, they asserted that the Department had no leverage to require the shift in production to the Michigan plant.*"

Actual: NETL officials actually said that LG Chem had a transition plan that was based upon a specific level of production at the facility and that the monthly demand had not reached the amount identified in the LG Chem plan. As well, NETL did not "assert" anything associated with the ability to leverage a shift in production to the Michigan Plant. NETL officials said that the grant terms and conditions cannot be used to force LG Chem Michigan Inc. to transition production of battery cells from South Korea to the Michigan plant. DOE does not have authority to require LG Chem Michigan Inc. to produce, for the purpose of sales, specific products or product lines at the Michigan facility. This is a matter of law, not a matter that is an NETL ascertain or opinion. It is unclear why the IG would make this summary statement for NETL officials.

False NETL Statement #2: Report, Page 14, "*Federal officials also indicated that although the final two assembly lines were not installed, failure to complete the planned capacity would not impact the maximum amount of the Department's contribution.*"

Actual Occurrence: No one, to include NETL or any DOE representative ever made this statement. I can't even tell where this statement could have originated from. No one at any level within the DOE would make this type of statement.

Report Creates LG Chem Statements that were NOT Reviewed by LG Chem Officials for Accuracy

LG Chem Suspected False Statements: There are approximately six (6) statements within reference (a) which were not reviewed by LG Chem for accuracy prior to publication of the IG report and the statements don't align with information provided to NETL representatives as they relate to the project. Therefore, the statements are suspect with respect to accuracy and correctness. However, since LG Chem was never provided the statement for review and comment, the statements cannot be verified for truthfulness or accuracy.

LG Chem Suspected False Statement #1: Report, page 3, "*LG Chem Michigan officials estimated that the Department's 50 percent share of the cost to complete the five production lines called for by the grant agreement would be \$22 million, an amount that would significantly exceed the remaining funds available under the grant award.*"

Reason to Suspect the accuracy of the statement: The DOE share of the Recovery Act award is capped at \$151,387.00. Therefore, LG Chem is fully aware that the DOE will not provide any further funds toward the award and LG Chem will be required to fully address any cost overages that may be encountered to complete the project. As well, all project plans and discussions with LG Chem have *never* indicated a request for additional DOE funds to complete the project. Therefore, it is unclear why LG Chem would tell the IG something that was never before, and has never since, been requested or mentioned to NETL or the DOE. However, since LG Chem was never provided the statement for review and comment, the statements cannot be verified for truthfulness or accuracy.

LG Chem Suspected False Statement #2: Report, page 3, "*LG Chem Michigan officials indicated that they had not begun production at the facility because demand for the Chevrolet Volt, the U.S. manufactured vehicle for which the plant was to produce battery cells, had not developed as anticipated.*"

Reason to Suspect the accuracy of the statement: LG Chem has always indicated that the planned startup for the facility was based on a predetermined market demand thresholds that had not yet been reached. It is unclear why the IG would tell the IG something in a manner that is inconsistent with discussions and communications that have been provided to the DOE for the last few years. The IG statement seems to indicate that the decision was arbitrary when the LG Chem plan is actually based on an analytically derived, demand based, plan to initiate production at the facility. However, since LG Chem was never provided the statement for review and comment, the statements cannot be verified for truthfulness or accuracy.

LG Chem Suspected False Statement #3: Report, page 3, "*The period of performance for the grant runs through May 2013. Yet, based on progress and current plans of LG Chem Michigan officials at the time of our review, the expected benefits of the project are not likely to be realized within the originally anticipated timeframes.*"

Reason to Suspect the accuracy of the statement: It is apparent that LG Chem mentioned the ongoing discussion associated with a request to extend the project in order to finish the remaining 2 battery assembly lines. It is doubtful that LG Chem would have made a statement in this context without mentioning the request to extend the project. However, since LG Chem was never provided the statement for review and comment, the statements cannot be verified for truthfulness or accuracy.

LG Chem Suspected False Statement #4: Report, page 4, "*For instance, LG Chem Michigan officials told us that they made a decision to delay production of battery cells at the Michigan facility. LG Chem Michigan officials made that decision even though demand for the Chevrolet Volt averaged 1,955 vehicles per month in*

2012. That volume could have readily been produced by using the then built-out capacity of the Michigan plant."

Reason to Suspect the accuracy of the statement: LG Chem has always indicated that the planned startup for the facility was based on a predetermined market demand and the required level of demand had not yet been reached. It is unclear why the IG would tell the IG something in a manner that is inconsistent with discussions and communications that have been provided to the DOE for the last few years. The IG statement seems to indicate that the decision was arbitrary when LG Chem plan is actually based on an analytically derived, demand based, plan to initiate production at the facility. However, since LG Chem was never provided the statement for review and comment, the statements cannot be verified for truthfulness or accuracy.

LG Chem Suspected False Statement #5: Report, page 4, "Further, *LG Chem Michigan officials told us that the vast majority of the increase in project costs was due to errors in estimating labor costs. For example, LG Chem Michigan failed to account for the Recovery Act requirement to utilize Davis-Bacon Act wage rates for subcontractors.*"

Reason to Suspect the accuracy of the statement: LG Chem has consistently indicated that the increase in project cost was associated with increased labor *hours* to complete the construction activity (not Davis Bacon) and increases in the cost of manufacturing equipment. This information is supported within the latest Project Management Plan as well. It is odd that LG Chem would have provided information to the IG that is different than what was provided to the DOE with respect to project cost increases. Additionally, as required by OMB, the the funding opportunity announcement required a certification that Davis Bacon wages were planned within the project budget, and LG Chem provided that certification as part of the application submitted in response o the funding opportunity announcement. Therefore it is reasonable to assume that this was a conclusion by the IG that was not substantiated by LG Chem. However, since LG Chem was never provided the statement for review and comment, the statements cannot be verified for truthfulness or accuracy.

LG Chem Suspected False Statement #6: Report, page 4, "For instance, *company officials we spoke with conceded that they submitted all labor costs for reimbursement because, as they asserted, they were unfamiliar with the types of costs that were allowable/unallowable.*"

Reason to Suspect the accuracy of the statement: It appears that the IG may have asked LG Chem if they thought that the "Community Service" activities that they "incorrectly" invoiced for were allowable or unallowable. It also appears that LG Chem may have indicated that they thought that they were not certain (since community service activities are "allowable" under FAR part 31, Cost Principles for For-Profit Organizations, section 31.205-1) and indicated that they were not aware that the activities were not allowed at the time of the invoice submission. However, since LG Chem was never provided the statement for review and comment, the statements cannot be verified for truthfulness or accuracy.

Report Creates Facts Known To Be False

False Facts: There are some statements captured within reference (a) which are just plain false and misleading.

False Fact #1: Report, page 2, "*The objective of the project was to design, construct, start up and test a production facility for lithium-ion polymer batteries, create more than 440 jobs, and produce enough battery cells annually to equip 60,000 electric vehicles by the end of 2013, with assembly beginning in 2012.*"

False Fact #2: Report, page 3, "*Less than half of the expected number of jobs had been created to support the project*"

Actual: Plain reading of the first page of the LG Chem project management plan clearly states that the planned jobs were to be achieved when the facility was producing at full capacity. LG Chem never had a plan for the facility in Michigan to be at full production in 2013 and therefore never had a plan to employ 440 people in 2013. The statement included in the report is false and misleading. The IG representatives knew this fact since it was pointed out to them on several occasions while referencing the project management plan and the original LG Chem application for funds. The original LG Chem application and project management plan were provided to the IG, however were apparently not considered.

False Fact #3: Report, Page 4, "For example, even though there were indications that the project was not progressing as planned early in 2012 – reflected by employee furloughs, construction delays and cost overages – *NETL had not taken action to determine whether payments to LG Chem Michigan should be suspended until further review of the project. Notably, the Office of Energy Efficiency and Renewable Energy had taken action to suspend reimbursements for labor charges when it became aware of potential improprieties in October 2012.*"

False Fact #4: Report, page 13, "For example, even though there were indications that the project was not progressing as planned – including employee furloughs, construction delays and cost overages – *NETL had not taken action to determine whether payments to LG Chem Michigan should have been suspended pending further review of the project.*"

Actual Occurrence: *NETL* took action on October 23rd, 2012 which suspended reimbursements under the award. The letter from the contracting officer was provided to the IG prior to sending to LG Chem. The letter has also been provided to the IG again on different occasions as well.

False Fact #5: Report, page 13, "*NETL did not require LG Chem Michigan to take corrective action when it became evident that the cost of the project would exceed the planned budget.*"

Actual Occurrence: *NETL* took action on October 23rd, 2012 which suspended reimbursements under the award and requested a corrected budget and project management plan. The letter from the contracting officer was provided to the IG prior to sending to LG Chem. The letter has also been provided to the IG again on different occasions as well.

False Fact #6: Report, page 13, "*While NETL completed a technical review of the budget, it did not ensure that LG Chem Michigan accounted for the requirement to utilize Davis-Bacon Act wage rates for subcontractors.*"

Actual Occurrence: *NETL* included the requirement for compliance with Davis Bacon wage determinations in the program solicitation for applications and requested that applications provide information which certifies that all laborers and mechanics on projects are paid wages at rates not less than those prevailing. This requirement was in alignment with OMB requirements set forth for the Recovery Act. The budget confirmation that Davis Bacon Wages formed a basis for the budget was provided in the budget from LG Chem and reviewed by *NETL*. The LG Chem budget submission, which included the statement validating that Davis Bacon rates were included within the overall budget, was never requested and was therefore never reviewed by the IG. It is unclear why the IG created a finding without investigative due diligence.

Audit Criteria Was Subjectively Created and Not Aligned to Legislation

Reference (a) indicates that the IG reviewed applicable laws and regulations, including those pertaining to the Recovery Act in writing the report. Reference (b), paragraph 6.37, designates that legislation that provides authority for the program should be used set the goals for the program or project. However, the IG deviated from audit requirements to subjectively establish criteria for jobs and production timelines for evaluating project progress within the reference (a)

report, both criteria are not contractual or enforceable under Recovery Act legislation or associated OMB guidance. The verbiage of the Recovery Act legislation follows:

"That \$2,000,000,000 shall be available for grants for the manufacturing of advanced batteries and components and the Secretary shall provide facility funding awards under this section to manufacturers of advanced battery systems and vehicle batteries that are produced in the United States, including advanced lithium ion batteries, hybrid electrical systems, component manufacturers, and software designers"

This legislation does not have criteria for production timelines and job creation since both are anticipated "outcomes" of a successful project. However, the use of these outcomes as criteria, when the outcomes are not an enforceable requirement is not correct. Additionally, this approach contradicts reference (b), paragraph 6.37, "Identifying Audit Criteria", which governs the process to be used when setting up audit criteria.

It is unclear why the IG would establish criteria that are not in alignment with audit procedures and are also not enforceable under the laws that govern the funding appropriation. However, the report continuously identifies deficiencies associated with project job creation and production timelines as deficiencies with respect to project goals and objectives. This seems to be a method to create the illusion of deficiencies and sensationalism for the public.

Summary

The information provided in this correspondence provides evidence that reference (a) contains facts known to be materially false or fictitious by the IG. This constitutes misconduct that was supported and facilitated by responsible IG personnel during report drafting, review, finalization, and posting. The report contains misleading summary comments and statements that were designed to embellish the overall role of the IG in the investigation while also misleading the public as to facts obtained by the IG and conclusions that are drawn based on these facts.

Specifically, the report identifies summary quotes of NETL Officials as well as LG Chem Officials that were based on the investigator's hand written notes crafted to reflect the supposed substance of the exchange. Therefore, the IG report becomes the sole arbiter of what was, and was not, said. It also sets the circumstance or sense of the conversation with no chance for rebuttal by the person or persons interviewed. The action by the IG resulted in a manipulation of truth which has now been widely published and viewed by the public.

I am recommending a full investigation of every false or unsubstantiated statement contained in the report along with the reason/rationale provided by the IG for including each. I would recommend a full investigation as to why the IG Report author and the entire IG report review chain made an active choice to forgo truth and fact in order to publish a report containing false statements. I would recommend all in the review chain, to include Mr. Friedman, are held accountable for these actions as they are an arbitrary abuse of power, position, and authority that should not be overlooked or tolerated.

Distribution:

Senator Joe Manchin, U.S. Senator for West Virginia, http://manchin.senate.gov/contact_form.cfm
Senator Debbie Stabenow, U.S. Senator for Michigan, <http://www.stabenow.senate.gov/?p=contact>
Office of Inspector General Hotline, ighotline@hq.doe.gov

(b)(6), (b)(7)(C)

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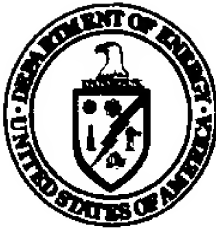
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U.S. Department of Energy
Office of Inspector General
Office of Audits and Inspections

Special Report

The Department of Energy's
Management of the Award of a \$150
Million Recovery Act Grant to LG
Chem Michigan Inc.



OAS-RA-13-10


February 2013



Department of Energy
Washington, DC 20585

February 8, 2013

MEMORANDUM FOR THE UNDER SECRETARY OF ENERGY

FROM: 
Gregory H. Friedman
Inspector General

SUBJECT: **INFORMATION:** Special Report on "The Department of Energy's Management of the Award of a \$150 Million Recovery Act Grant to LG Chem Michigan Inc."

BACKGROUND

The Department of Energy's Vehicle Technologies Program was established to develop and deploy efficient and environmentally friendly highway transportation technologies to reduce the Nation's dependence on foreign oil and provide greater energy security. The Vehicle Technologies Program received \$2.4 billion under the American Recovery and Reinvestment Act of 2009 for these purposes. The program is managed by the Office of Energy Efficiency and Renewable Energy and is being implemented and monitored primarily by the Department's National Energy Technology Laboratory (NETL).

In February 2010, LG Chem Michigan Inc. (LG Chem Michigan), formerly Compact Power Inc., was awarded more than \$150 million in Recovery Act funding to help construct a \$304 million battery cell manufacturing plant in Holland, Michigan. As part of this process, LG Chem Michigan was also eligible to receive more than \$175 million in tax relief from the State and local governments through 2025. The objective of the project was to design, construct, start up and test a production facility for lithium-ion polymer batteries, create more than 440 jobs, and produce enough battery cells annually to equip 60,000 electric vehicles by the end of 2013, with assembly beginning in 2012.

On October 24, 2012, the Office of Inspector General received a complaint that LG Chem Michigan misused Recovery Act funds. The complainant asserted that employees at the Michigan facility had little work to do and were spending time volunteering at local non-profit organizations, playing games and watching movies at the expense of the Federal government and taxpayers. In a separate action, the Department's Chief of Staff and its General Counsel brought similar concerns to our attention. We initiated this review to examine the allegations and to evaluate the Department's management of the Recovery Act grant awarded to LG Chem Michigan.

RESULTS OF REVIEW

We confirmed the allegations. We found that work performed under the grant to LG Chem Michigan had not been managed effectively. Based on progress to date and despite the expenditures of \$142 million in Recovery Act funds, LG Chem Michigan had not yet achieved the objectives outlined in its Department-approved project plan.

The allegation that the Department reimbursed LG Chem Michigan for labor costs that did not support the goals and objectives of the grant was substantiated. Our review revealed that LG Chem Michigan inappropriately claimed and was reimbursed for labor charges incurred by a variety of supervisory and staff employees for activities that did not benefit the project. Through interviews with LG Chem Michigan management and other staff, we confirmed that employees spent time volunteering at local non-profit organizations, playing games and watching movies during regular working hours. As such, we determined that the Department reimbursed the company for questionable labor costs incurred in the third quarter of 2012. We were unable to calculate the exact loss to the Government because LG Chem Michigan did not track labor activities in detail. However, based on LG Chem Michigan employee revelations regarding work habits, we believe it is likely that the total amount of charges that included at least some non-productive work exceeded \$1.6 million, about \$842,000 of which was reimbursed by the Department in accordance with its cost-sharing arrangement for the project. The projected overpayment by the Department assumes that LG Chem Michigan complied with the terms of its grant to share costs on an equal basis, an aspect that we did not confirm.

We found that the overall goals related to production of battery cells and the projected number of jobs created had yet to be met. In particular:

- Even though the facility had produced a large number of test cells, the plant had yet to manufacture battery cells that could be used in electric vehicles sold to the public.
- Only about 60 percent of the production capacity set forth in the grant agreement was constructed even though nearly \$142 of \$151 million (94 percent) of the Department's share of project funds had been spent. LG Chem Michigan officials estimated that the Department's 50 percent share of the cost to complete the five production lines called for by the grant agreement would be \$22 million, an amount that would significantly exceed the remaining funds available under the grant award. These same officials noted, however, that they had no plans to complete the remaining lines unless demand improved dramatically. We found that LG Chem Michigan had significantly underestimated labor costs and that this was a primary cause of its inability to complete planned construction.
- Project documentation prepared to support the grant award indicated that production of battery cells would transition from LG Chem's South Korean facility to the Michigan plant beginning in 2012, assuming that demand grew as expected. LG Chem Michigan officials indicated that they had not begun production at the facility because demand for the Chevrolet Volt, the U.S. manufactured vehicle for which the plant was to produce battery cells, had not developed as anticipated.
- Less than half of the expected number of jobs had been created to support the project. The period of performance for the grant runs through May 2013. Yet, based on progress and current plans of LG Chem Michigan officials at the time of our review, the expected benefits of the project are not likely to be realized within the originally anticipated timeframes.

The problems we identified occurred, in large part, due to grant monitoring issues with LG Chem Michigan and the Department. Notably, LG Chem Michigan did not fully realize the grant's target goals, and the Department did not always take sufficient action to ensure adequate oversight of project progress and, in turn, protect the taxpayers \$142 million investment in the project. For instance, LG Chem Michigan officials told us that they made a decision to delay production of battery cells at the Michigan facility. LG Chem Michigan officials made that decision even though demand for the Chevrolet Volt averaged 1,955 vehicles per month in 2012. That volume could have readily been produced by using the then built-out capacity of the Michigan plant. NETL officials commented that it was anticipated at the time the grant was awarded that the transition of production from non-U.S. sources to Michigan would occur; however, language requiring the shift in production had not been incorporated into the grant. Thus, they asserted that the Department had no leverage to require the shift in production to the Michigan plant. Yet, until the shift in production takes place or some alternative use for the plant is developed, U.S. taxpayers will receive little direct benefit from a plant for which they provided up to half of the funding.

Further, LG Chem Michigan officials told us that the vast majority of the increase in project costs was due to errors in estimating labor costs. For example, LG Chem Michigan failed to account for the Recovery Act requirement to utilize Davis-Bacon Act wage rates for subcontractors. We found this lapse hard to understand given the emphasis placed on strict compliance with Davis Bacon as one of the Recovery Act's basic principles, a fact that was well known to industry and to responsible Department officials.

In addition, LG Chem Michigan management had not adequately implemented the terms and conditions of the grant agreement as related to unallowable costs. For instance, company officials we spoke with conceded that they submitted all labor costs for reimbursement because, as they asserted, they were unfamiliar with the types of costs that were allowable/unallowable. We found, however, that grant documentation and related Federal regulations clearly established what types of costs were permissible.

We also noted a lack of effective monitoring of grant activities by NETL related to project progress and labor reimbursements. For example, even though there were indications that the project was not progressing as planned early in 2012 – reflected by employee furloughs, construction delays and cost overages – NETL had not taken action to determine whether payments to LG Chem Michigan should be suspended until further review of the project. Notably, the Office of Energy Efficiency and Renewable Energy had taken action to suspend reimbursements for labor charges when it became aware of potential improprieties in October 2012. In preliminary comments on our report, officials also stated that documentation received from LG Chem Michigan did not indicate that the project would not ultimately meet its goals and objectives. In addition, we determined that the Federal project monitoring process had not identified the questionable labor activities highlighted in our report.

Production and Transition Issues

LG Chem Michigan officials told us that they were faced with difficult decisions regarding the workforce at the Michigan facility. Plant managers noted that they wanted to do their best to maintain the workforce in hopes that production would start soon. They also indicated that they

resorted to furloughs and permitted employees to engage in non-productive activities to help ensure that their investment in training the employees was not lost. In addition, LG Chem Michigan officials indicated that their range of options was limited, claiming that shifting production to the Michigan plant at this point would actually result in financial losses on battery cells produced in the U.S.

We acknowledge that company officials were faced with difficult choices, with lack of demand for the product being at the core of LG Chem Michigan's problem. Yet, the basic question for Federal grant administrators, in our opinion, was whether grant funding should have continued or suspended once it became clear that: (i) all the promised production lines could not be completed within budget; and, (ii) LG Chem Michigan would continue to fill U.S. demand with battery cells made in South Korea. In light of those realities, we question whether Federal reimbursements for labor payments for any of the plant's employees and other project costs should have continued without a thorough re-evaluation of the project. At the time these facts became known, in our judgment, business risk for the endeavor should have shifted to LG Chem Michigan and should not have been borne, even in part, by the U.S. taxpayer. Ironically, program officials told us that they were considering a request from LG Chem Michigan to extend the grant period until 2016.

Impact and Path Forward

The LG Chem Michigan grant recipient faced a number of challenges. Most notably, the demand for battery cells to be produced at the Michigan plant was less than anticipated, frustrating efforts by the Department and its Recovery Act grant recipient to promote the use of electric vehicles and reduce the Nation's dependence on foreign oil. To its credit, NETL had initiated prompt actions related to resolving issues highlighted in the complaint initially referred to us by the Recovery Accountability and Transparency Board, including recovering presumptively unallowable labor reimbursements identified in our report and requiring LG Chem Michigan to submit an action plan to address concerns with the progress of the project.

While the efforts of the Department and LG Chem Michigan's immediate reaction to the allegations resulted in recovery of the non-productive labor charges, the results of our review indicated that more fundamental issues existed, limiting the possibility that the objectives of the project will be met. Without improvements, the Department may continue to reimburse LG Chem Michigan for costs that do not support the intent of the grant. As such, we have made a series of recommendations that should assist the Department in managing its Vehicle Technologies Program as it relates to LG Chem Michigan and similarly situated grantees.

MANAGEMENT REACTION

Management concurred with the report's recommendations and indicated that it had taken and/or initiated corrective action to address issues identified in our report.

In its comments on the report, officials confirmed that LG Chem Michigan had reimbursed the Department for the \$842,000 in costs that we had found to be unreasonable and unallowable. However, management noted that this was only a very small percentage of the overall grant. We

think that this comment misses the point. First, our review of costs incurred was limited to costs related to unproductive labor charges by LG Chem Michigan – that is, those charges identified in the initial allegation relating to idle workers playing board games and watching movies at Government expense. Thus, we did not evaluate the reasonableness of the larger body of incurred costs. Second, we leave it to each reader of the report to make their own judgment as to the significance of a \$842,000 reimbursement. Finally, the audit surfaced issues relating to the management of this grant which transcend the reimbursed amount in importance.

Management's comments and our response are summarized and more fully discussed in the body of the report. Management's formal comments are included in their entirety in Appendix 3.

Attachment

cc: Deputy Secretary
Assistant Secretary for Energy Efficiency and Renewal Energy
General Counsel
Chief of Staff

**SPECIAL REPORT ON THE DEPARTMENT OF ENERGY'S
MANAGEMENT OF THE AWARD OF A \$150 MILLION RECOVERY ACT
GRANT TO LG CHEM MICHIGAN INC.**

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THE DEPARTMENT OF ENERGY'S MANAGEMENT OF THE AWARD OF A \$150 MILLION RECOVERY ACT GRANT TO LG CHEM MICHIGAN INC.

PROJECT PERFORMANCE AND COST

The Department of Energy (Department) and LG Chem Michigan Inc. (LG Chem Michigan) had not effectively managed grant activities related to the Electric Drive Vehicle Battery and Component Manufacturing Initiative (Manufacturing Initiative). In particular, based on progress at the time of the report and despite the expenditure of \$142 million in American Recovery and Reinvestment Act of 2009 (Recovery Act) funds, we found that production and job creation goals and objectives outlined in the Department-approved project plan are unlikely to be achieved within anticipated timeframes. Furthermore, LG Chem Michigan inappropriately claimed and was reimbursed for labor costs that did not support the purpose/objective of the grant, including costs for workers to perform volunteer activities, play games and watch movies during regular work hours.

Project Goals and Objectives

We found that the goals and objectives of the Manufacturing Initiative had not yet been met. The objective of the project was to design, construct, start up and test a production plant for lithium-ion batteries to support the manufacture of 60,000 electric vehicles by the end of 2013. Although assembly operations were to begin at the Michigan plant in 2012, we noted that goals related to production of battery cells and the number of jobs created had not been achieved. While the period of performance for the grant will continue until at least May 2013, and many variables affect whether goals are realized, our evaluation indicated that the expected benefits of the project are unlikely to be realized within the originally anticipated timeframes. In particular:

- Although LG Chem Michigan had made significant progress related to completion of design, construction and testing of the plant, it had not begun production of battery cells for commercial use. We noted that while a large number of test cells had been created as of June 2012, the plant had yet to have the entire production process tested and validated and, therefore, had not generated any cells that could be used in electric vehicles sold to the public.
- Grant award documentation indicated that production of battery cells was scheduled to transition to the Michigan plant from non-U.S. sources beginning in 2012, assuming that demand achieved expected levels. However, we found that this had not occurred. The project plan called for beginning production of battery cells in 2012, at the

Michigan plant, with production of all Chevrolet Volt battery cells occurring at the Michigan plant by the end of 2013. LG Chem Michigan officials commented, however, that while they were prepared to begin production, they had not begun the transition to the Michigan plant due to lower than expected demand for electric vehicles.

- Production capacity set forth in the grant agreement had not been realized even though nearly all the Department's share of project funds had been spent. Specifically, the project plan called for 5 production lines that would each produce enough battery cells annually to support at least 12,000 vehicles. However, despite spending \$142 million (94 percent) of funds available from the Department, only three of five production lines had been constructed. LG Chem Michigan officials estimated that construction of the additional lines, if completed, would cost about \$44 million. Under the terms of the grant, the Department's share would be \$22 million, which would significantly exceed the remaining grant funds. Based on our review of available documentation, we determined that the vast majority of the increase in project costs was due to higher than expected labor costs. Specifically, despite budgeting \$15 million for the installation of all equipment, LG Chem Michigan had spent nearly \$30 million by the time of our review on completing only three of the five production lines. Furthermore, LG Chem Michigan officials indicated that the company had indefinitely delayed plans to construct the final two assembly lines.
- Although project planning documentation estimated that the project would create more than 440 jobs by the end of 2012, less than half of the expected number of jobs had actually been created. We found that the plant reached a peak of 215 jobs in early 2012, but the number of employees had dropped to 200 by the time of our review. To help compensate for the lack of production and reduce operating costs, plant management decided to furlough employees beginning in April 2012. The furloughs continued at the time of our review and, according to plant officials, had saved the company nearly \$580,000 to date, a portion of which was realized by the Department. With no firm plans to begin production, it is unclear how and when the idle capacity will be addressed.

Labor Activities

We concluded that the Department paid LG Chem Michigan for labor costs that did not support the goals and objectives of the grant. Specifically, our review of worker activities at LG Chem Michigan, including supervisors, operators and engineers, indicated that employees used regular work hours to volunteer at local organizations, play board, card and video games and watch movies. As such, we determined that the Department may have reimbursed the company up to about \$842,000 for questionable labor charges for just the third quarter of 2012. In particular, we found:

- 16 of 26 employees interviewed had participated in various volunteer activities during normal work hours in recent months. Based on our evaluation, we determined that the volunteer work began in or around August 2012, and continued until November 2012. This included volunteer work at Habitat for Humanity, animal shelters and outdoor nature centers, among others. While our interviews demonstrated that these activities had taken place, we were unable to quantify the number of days spent on volunteer work because the company did not track labor activities to this level of detail. Our test work indicated, however, that the amount of time spent volunteering ranged from one day for certain employees to 5 days per week for others. In total, the cost of labor for the third quarter was about \$2.3 million, including \$1.7 million for direct labor charges and \$670,000 in related fringe benefits.
- 13 of 26 employees we spoke with had participated in various activities at work that were not appropriate for reimbursement by the Department, including watching movies and playing board, card and video games. We determined that these activities generally began prior to the volunteer work and continued until just before the time of our review. For instance, at least two individuals interviewed believed that such activities began prior to July 2012, but did not provide any documentation to support this assertion. Similar to the volunteer work, we were unable to quantify the amount of time spent on these activities because the company did not track labor to this level of detail.

National Energy Technology Laboratory (NETL) officials became aware of the questionable activities as a result of media reports and notified LG Chem Michigan on November 1, 2012, that it would

not be reimbursed for its share of more than \$531,000, or approximately \$265,500 (half of \$531,000), in labor costs occurring in the third quarter of 2012. We determined, however, that the amount of questionable labor costs may be much higher. Specifically, NETL's estimate only included costs for production supervisors and operators, but did not include costs of more than \$482,000 for several other categories of employees that also participated in volunteer activities, game playing and movie watching during work hours. The estimate developed by NETL was based on inaccurate information provided by LG Chem Michigan regarding which individuals had participated in volunteer activities. Based on our review, we are questioning costs of up to about \$842,000, as summarized in the following table.

Functional Group	Total Employees	Labor Costs by Functional Group	Questioned Labor Costs ¹
Construction	5	\$49,798	-
Production Engineers	20	\$283,266	\$283,266
Production Supervisors	4	\$48,427	\$48,427*
Production Operators	101	\$483,037	\$483,037*
Electrode Engineer	5	\$55,885	-
Electrode Operators	12	\$56,049	\$56,049
Administrative Personnel	22	\$407,514	-
Preventive Maintenance Technicians	8	\$81,314	-
Preventive Maintenance Engineers	3	\$47,534	-
Quality Assurance Engineers	6	\$75,940	\$75,940
Quality Assurance Operators	14	\$67,400	\$67,400
Total Direct Labor	200	\$1,656,164	\$1,014,119
Fringe Benefits		\$670,258	\$670,258
Total Labor		\$2,326,422	\$1,684,377
		Department's Share of Cost	50%
		Total Questioned Costs	\$842,189

* These costs were initially questioned by NETL. The calculation of questioned costs assumes that LG Chem Michigan complied with the terms of its grant to share costs equally – an aspect that we did not confirm.

The decision of the company to permit employees to perform questionable activities using Department funds did not support the goals and objectives of the grant agreement, and therefore, was a questionable cost. LG Chem Michigan management told us that it was unaware that these costs may be considered unallowable and would work with the Department to address the situation. We found, however, that grant terms and readily available Federal regulations on the subject clearly established the types of costs that

¹ We did not question costs for certain labor categories because our sample of interviews did not identify individuals that participated in activities that did not support the goals and objectives of the project.

were appropriate. Subsequent to our review, Department officials provided evidence that they had fully recovered the questioned costs identified in our report.

Project Implementation and Monitoring

The problems we identified occurred, in part, because LG Chem Michigan had not effectively implemented activities that supported the goals and objectives of the Manufacturing Initiative. In addition, many of the issues identified were due to the lack of effective monitoring of grant activities by NETL related to project progress and labor reimbursements. Furthermore, the goals and objectives of the project were not met within the estimated timeframes, in part, because electric vehicle sales were lower than anticipated.

Grant Activities

Senior LG Chem Michigan officials decided to retain production of battery cells outside of the U.S. rather than transition operations to the Michigan plant because the demand for electric vehicles was lower than anticipated. LG Chem Michigan officials made that decision even though demand for the Chevrolet Volt, the U.S. manufactured vehicle for which the plant was to produce batteries, averaged 1,955 vehicles per month for 2012. That volume could have readily been produced by using the then built-out capacity of the Michigan plant. In addition, while the potential for production overcapacity was highlighted as a significant risk in the Project Management Plan when the grant was awarded, LG Chem Michigan's response indicated that demand for electric vehicles was strong enough to mitigate these concerns and that supply agreements with other major vendors would be obtained. At the time of our review, however, no other agreements had been established.

LG Chem Michigan also had not appropriately implemented the terms and conditions of the grant as related to potentially unallowable labor costs. In particular, company officials we spoke with explained that they were unfamiliar with all of the nuances of the agreement because they had never received grant funds from the Department prior to the Recovery Act. However, we noted that the terms and conditions of the grant referred to Department Financial Assistance Regulations, 10 CFR 600, which demonstrated the types of activities that were permissible under the terms of the award. For instance, Federal regulations state that costs could be considered reasonable, and therefore reimbursable, if ordinary and necessary for the conduct of business or contract performance. LG Chem Michigan management also noted that it

made the decision to pay individuals to support local community activities rather than potentially terminating their employment due to a lack of production. They explained that this decision was made in response to the high cost to train workers and the fluidity in vehicle sales projections. However, we continue to question whether the cost for various activities should have been reimbursed by the Department as it did not appear reasonable to meet the intent of the grant. In our opinion, the cost of business decisions made by LG Chem Michigan should be absorbed by the company, not the U.S. taxpayer.

Monitoring and Oversight

The issues identified were also due to a lack of effective monitoring of grant activities by NETL related to project progress and labor reimbursements. For example, even though there were indications that the project was not progressing as planned – including employee furloughs, construction delays and cost overages – NETL had not taken action to determine whether payments to LG Chem Michigan should have been suspended pending further review of the project. In particular, although a technical review of the project's budget was completed during the grant award process, NETL did not require LG Chem Michigan to take corrective action when it became evident that the cost of the project would exceed the planned budget. For instance, our review of a site visit checklist completed by Federal officials in August 2012, did not include any discussion related to a comparison of cost versus capacity. In fact, documentation we reviewed indicated that the project was on track to meet program milestones and that there were no concerns with project progress. In addition, LG Chem Michigan officials told us that the vast majority of the increase in project costs was due to errors made by the company in estimating labor costs. While NETL completed a technical review of the budget, it did not ensure that LG Chem Michigan accounted for the requirement to utilize Davis-Bacon Act wage rates for subcontractors.

We also determined that NETL did not question LG Chem Michigan's decision to delay production at the Michigan plant. NETL officials commented that while they were aware of the planned transition to the Michigan plant as part of the grant documentation, they stated that the Department could not interfere with LG Chem Michigan's business decisions and noted that this did not impact the need to establish the award. In preliminary comments on our report, officials noted that the project plan included language related to transitioning production to Michigan,

but that factor had never been incorporated in the terms of the grant award. Federal officials also indicated that although the final two assembly lines were not installed, failure to complete the planned capacity would not impact the maximum amount of the Department's contribution. Senior LG Chem Michigan officials commented, however, that there were no plans to install the additional lines in the near future due to lower than expected demand for electric vehicles.

In addition, we determined that the Federal project monitoring process had not identified the questionable labor activities highlighted in our report. Although the Federal Project Manager visited the plant at the end of August 2012 – after many of the volunteer activities, games and movies had already begun – the issues were not identified. In light of the indications that the project was not progressing as planned and production had not begun, we believe it would have been prudent for Federal officials to inquire about employee activities given the large number of individuals employed at the plant. Had officials spoken to project engineers and/or operators about what they were doing during periods of inactivity, the questionable activities may have been identified. In fact, we do not believe that the monitoring process used by NETL would have ever identified the labor issues highlighted in our report. To its credit, NETL took immediate actions to respond to the allegations of labor improprieties, including suspending payments for labor, initiating cost recovery proceedings and directing LG Chem Michigan to develop corrective action plans.

Market Factors

NETL and LG Chem Michigan officials told us that lower than anticipated sales of electric vehicles also played a significant role in the progress of the Manufacturing Initiative. Specifically, although initial demand projections at the time of award were for 60,000 vehicles per year, 2012 sales totaled only 23,461. As a result, LG Chem Michigan officials decided to construct only three of the five planned production lines for the lithium-ion polymer batteries used to manufacture electric vehicles. LG Chem Michigan officials stated that they had placed an order for equipment to support assembly of a fourth production line, but suspended the order in December 2011, due to the lack of activity at the plant. While we recognize that the demand for electric vehicles was a significant factor impacting the success of the plant, the issues identified in our report demonstrate that there were also opportunities for enhanced project management practices

that should have been utilized to help implement the project in an effective manner.

Lack of demand and progress problems should have, in our opinion, prompted Federal officials to intensify/focus their review efforts on determining whether funding for the plant should have continued or should have been suspended pending further review. Notably, LG Chem Michigan officials told us that they have no specific plans to begin production in Michigan because of low demand. Even though NETL officials were aware of this fact, they told us that they could not interfere with business decisions of the company. Instead, they elected to continue to fund, in essence, business risks that, in our opinion, should have been assumed by LG Chem Michigan when it became apparent the goals of the grant would not be achieved within the originally anticipated timeframes. Unless and until production begins at the Michigan plant, in our opinion, the U.S. taxpayer will garner little benefit from its \$143 million investment.

Impact and Path Forward

The Department faced a number of challenges in managing the LG Chem Michigan grant, particularly in light of the less than expected demand in the target market for battery cells to be produced at the Michigan plant. Without improvements, however, the Department may continue to reimburse LG Chem Michigan for costs that are questionable. For instance, as a result of the issues noted in this report, we identified up to about \$842,000 in questionable costs related to reimbursements for labor charges that did not support the intent of the grant.

In addition, we are concerned that the goals and objectives of the grant may not be fully achieved due to lower than expected demand for electric vehicles. While the lack of electric vehicle demand for the project was a significant factor to the issues identified in our report, senior LG Chem Michigan officials countered that the plant remained critical to the long-term strategy of the company and believed that it would eventually succeed – whether through increased demand for vehicle batteries or expanding the scope of plant activities to produce other products such as energy storage solutions. However, until the company begins production at the Michigan plant or develops some alternative use for the plant, U.S. taxpayers will receive little direct benefit from a plant for which they provided at least half of the funding.

RECOMMENDATIONS

To improve management of the Manufacturing Initiative and help achieve the goals of the Recovery Act, we recommend that the Assistant Secretary for Energy Efficiency and Renewable Energy direct Vehicle Technologies Program officials to:

1. Enhance grant monitoring procedures to ensure that goals and objectives of the Manufacturing Initiative are achieved in the most effective manner;
2. Utilize the full range of remedial actions available to the government under the terms of the grant to hold LG Chem Michigan accountable for the outcome of the Michigan project; and,
3. Coordinate with LG Chem Michigan officials to facilitate either beginning battery cell production at the Michigan plant or implementation of some alternative, productive use for the plant.

We also recommend that the contracting officers for the Vehicle Technologies Program:

4. Evaluate questioned costs identified in our report and recover overpayments made to LG Chem Michigan.

**MANAGEMENT
REACTION**

Department management agreed with the report's recommendations and stated that it had initiated actions to address the issues identified. For instance, management stated that it had taken action to disallow project costs identified in our report, although it noted that the unallowable labor costs represent less than 1 percent of EERE's contribution to the project. Management commented that while it was considering a request from LG Chem Michigan to extend the period of performance for the grant, the extension would not, in and of itself, increase the project's value or the Department's share of the project costs. In addition, management stated that it is committed to effective grants management and strives to implement sound grants management practices. Management also commented that, concurrent with our review, it provided guidance to LG Chem Michigan to assure a clear understanding of the reporting requirements as the project moves forward. Furthermore, management stated that it was in the process of establishing a uniform set of terms and conditions for funding opportunities and awards to facilitate active project management. Although management concurred with the need to enforce the terms and conditions of the grant award, it noted that under the terms of the grant it could not force LG Chem Michigan

to transition production to the Michigan plant. Management also provided technical comments that are addressed in the body of the report, where appropriate.

AUDITOR COMMENTS Management's comments and corrective actions are responsive to our recommendations. However, in response to management's comments on the unallowable labor costs identified in the report, we note that while these costs comprised less than 1 percent of EERE's contribution to project costs, the scope of our audit was limited and would not necessarily have identified all unallowable costs, because we did not review all project invoices. We modified Recommendation 3 in response to management's assertion that based on the terms of the grant, it could not force LG Chem Michigan to transition production to the Michigan plant. Management's formal comments are included in Appendix 3.

Appendix 1

OBJECTIVE

To determine whether work performed under the American Recovery and Reinvestment Act of 2009 (Recovery Act) grant awarded to LG Chem Michigan Inc. (LG Chem Michigan) was appropriately managed.

SCOPE

The review was performed between November 2012 and February 2013, at the National Energy Technology Laboratory in Morgantown, West Virginia, and the LG Chem Michigan plant in Holland, Michigan.

METHODOLOGY

To accomplish our objective, we:

- Reviewed applicable laws and regulations, including those pertaining to the Recovery Act;
- Interviewed Federal project officers, contract specialists and contracting officers regarding the grant awarded to LG Chem Michigan;
- Reviewed LG Chem Michigan grant documentation obtained from the Department of Energy's Strategic Integrated Procurement Enterprise System;
- Interviewed approximately 30 employees of LG Chem Michigan to obtain information related to activities performed at the plant, including the conduct of volunteer activities, game playing and video watching;
- Performed reviews of LG Chem Michigan's project plans, volunteer program, raw material balances and equipment tracking; and,
- Reviewed related reports issued by the Office of Inspector General and the U.S. Government Accountability Office.

An exit conference was held with officials on February 6, 2013.

RELATED REPORTS

Office of Inspector General Reports


- Audit Report on *Follow-up on the Department of Energy's Implementation of the Advanced Batteries and Hybrid Components Program Funded under the American Recovery and Reinvestment Act* (OAS-RA-L-12-05, July 2012). The review identified opportunities for the Department of Energy (Department) to improve its administration of the Advanced Batteries and Hybrid Components Program. Specifically, the Department could better define regulations governing the retention of documentation supporting procurement decisions. In addition, the Department should ensure recipients adequately safeguard equipment purchased with Federal funds. Lastly, the Department should obtain and review required audit reports to ensure the sufficiency of internal controls and compliance with laws and regulations.
- Audit Report on *Progress in Implementing the Advanced Batteries and Hybrid Components Program under the American Recovery and Reinvestment Act* (OAS-RA-L-10-04, April 2010). The audit revealed that the Department had made significant progress in implementing the Advanced Batteries and Hybrid Components Program. Specifically, the Department had issued a Funding Opportunity Announcement that included defined selection criteria and established a grantee selection process that incorporated review of all aspects of applicant proposals. In addition, the Department awarded funding to 20 grantees, obligating 85 percent of the available American Recovery and Reinvestment Act of 2009 funding for projects such as construction of factories that will build lithium-ion batteries for hybrid and electric vehicles and facilities that will produce materials and components to supply battery manufacturers. Furthermore, the Department had established conditions on the use of funds awarded until such time as grantees can demonstrate, for example, that they have completed environmental reviews. Finally, the Department developed a comprehensive monitoring program plan that, if successfully implemented, should reduce the financial, technical and marketing risks associated with the projects.

Government Accountability Office Report

- *Batteries and Energy Storage Federal Initiatives Supported Similar Technologies and Goals by Had Key Differences* (GAO-12-842, August 2012).

MANAGEMENT COMMENTS

MEMORANDUM FOR: RICKY R. HASS
DEPUTY INSPECTOR GENERAL FOR AUDITS AND
INSPECTIONS
OFFICE OF INSPECTOR GENERAL

FROM: KATHLEEN B. HOGAN 
DEPUTY ASSISTANT SECRETARY FOR ENERGY EFFICIENCY
ENERGY EFFICIENCY AND RENEWABLE ENERGY

SUBJECT: Response to Office of Inspector General Draft Special Report on
"Department of Energy's Management of the Award of a \$150 Million
Recovery Act Award by the Department of Energy to LG Chem Michigan
Inc."

The Office of Energy Efficiency and Renewable Energy (EERE) appreciates the opportunity to respond to this audit report.

EERE's investment was to partially fund an advanced battery manufacturing facility, and it's simply unacceptable that any of those funds were used to pay for other work in the community, or for any other purpose. Immediately upon learning of these allegations, EERE took swift action to stop further payments, secured a refund for taxpayers on \$842,189 in questionable costs, and report the matter to the Department's Inspector General. In addition, EERE is taking a series of steps to strengthen project management in the future, including a reorganization within EERE, an updated grants management process, increasing the number of site visits each year to large projects, and centralizing the review of project invoices. A more complete summary of these actions is below.

While the demand for electric vehicles hasn't grown quite as quickly as expected and there will likely be some more challenges in the next few years, electric drive vehicle sales tripled last year and are expected to continue growing rapidly. EERE's investment in this battery manufacturing facility – matched dollar for dollar by LG Chem Michigan Inc. – is helping to put Michigan and the United States in a prime position to capture a rapidly growing global market. This is part of an overall effort to make sure that America's auto manufacturing base continues to adapt to the most innovative technologies, deliver the gasoline-saving vehicles that consumers increasingly want, and to continue to grow the manufacturing sector in the United States.

While the Department has no tolerance for and moved swiftly to correct this case of inappropriate billing, it's also critical that the United States continue to compete aggressively for the clean energy jobs and industries of the future. Ultimately, the choice comes down to whether the United States should lead what will become an enormously valuable and growing market, or whether we will give up this industry because sales "only" grew 100 percent last year. Emerging technologies and industries often face struggles early on, but the race will be won by those who remain focused and committed to the end goal.

Appendix 3 (continued)

Electric Drive Vehicle Battery and Component Manufacturing Initiative

The objective of the Electric Drive Vehicle Battery and Component Manufacturing Initiative is to enable the United States to lead the development and manufacturing of batteries and components for electric drive vehicles (EDVs). EERE has invested, on a cost-shared basis with industry, in the establishment of a domestic battery and electric drive component industry capable of competing effectively in the global market. Specifically, EERE has provided financial assistance to raw materials suppliers, materials processors, electric drive component and systems manufacturers, cell manufacturers, and pack assemblers. This Initiative has successfully expanded domestic battery production capacity for EDVs – as of September 30, 2012, these projects had achieved a total manufacturing capacity exceeding 290,000 batteries/year.

LG Chem Michigan Inc. Project

EERE is providing financial assistance to LG Chem Michigan Inc. to construct an 850,000 square foot manufacturing facility in Michigan and to procure, install, and validate manufacturing equipment. LG Chem Michigan Inc. is contributing over half (\$151,403,339) of the total project cost (\$302,790,339), and EERE is providing the remainder (\$151,387,000). The unallowable labor costs identified in this report represent less than 1 percent (specifically, 0.5 percent) of EERE's contribution to this project.

This project will enable LG Chem to produce Lithium-Ion Polymer battery cells and batteries in the United States for automotive applications (including hybrid electric, plug-in hybrid electric, pure electric vehicles for commercial purposes, and military hybrid vehicles) and other applications, such as aviation, smart grid support, broadband backup power, and energy storage for renewable energy.

LG Chem Michigan Inc. has successfully completed the construction of the cell manufacturing facility and the installation of an electrode manufacturing line, four safety reinforcing separator lines, and three cell assembly lines. In addition, LG Chem Michigan Inc. has built hundreds of thousands of test cells to validate plant operation.

The project is scheduled to be completed on May 31, 2013; however, LG Chem Michigan Inc. has requested an extension in order to better align the remaining project tasks (representing about 6% of EERE's contribution to the total project cost) with market demand. If EERE grants this extension, it will not provide any additional funding beyond the amount specified in the original grant.

EERE Request for Office of Inspector General Assistance and Response

The unallowable labor costs identified in this audit report are unacceptable and indefensible. EERE will achieve full recovery of these labor costs – EERE is requiring LG Chem Michigan Inc. to repay all \$342,189, and LG Chem Michigan Inc. has agreed to do so.

DOE promptly referred the allegations of labor improprieties to the Office of Inspector General. In addition, EERE promptly took the following actions:

1. Suspended all reimbursements;
2. Initiated cost recovery proceedings;
3. Required LG Chem Michigan Inc. to develop a corrective action plan, including an updated project budget and project management plan in order to validate the project cost and schedule;
4. Increased scrutiny of quarterly project reports; and
5. Provided LG Chem Michigan Inc. with additional guidance on compliance with Federal reporting requirements.

Appendix 3 (continued)

Based on information provided by LG Chem Michigan Inc. and the Office of Inspector General, EERE has determined that:

- The unallowable labor costs identified in this audit report were outside the scope of the award;
- LG Chem Michigan Inc. did not have a process in place to accurately track and account for labor hours associated with out-of-scope activities;
- LG Chem Michigan Inc. did not disclose the out-of-scope activities in any documentation submitted to EERE (e.g., invoices);
- EERE was not made aware, through invoicing or otherwise, that it was reimbursing LG Chem Michigan Inc. for out-of-scope activities; and
- After EERE opened its inquiry into the questioned labor costs, LG Chem Michigan Inc. failed to provide adequate evidence to allow the specific identification of the unallowable labor costs versus allowable labor costs. As a result, EERE, in consultation with the contracting officer, made the determination to disallow (and require reimbursement of) the entire \$842,189, which includes a mix of allowable and unallowable costs.

EERE is committed to effective grants management. In April 2012, EERE began a comprehensive review of its grants management procedures. (This review predates the referral of LG Chem Michigan Inc.'s questioned labor costs to the Office of Inspector General in October 2012.)

- EERE benchmarked its grants management process against peer agencies (e.g., Advanced Research Projects Agency-Energy).
- EERE established an internal "community of practice" composed of subject matter experts in program and project management to develop new standard operating procedures and best practices, which will be applied to all EERE programs and projects.
- EERE created a new Project Management Coordination Office (PMCO) to ensure consistent and active project management across EERE's diverse portfolio of projects. PMCO is working with peer offices at other Federal agencies to develop training courses for Federal project managers and standards for a certification credential.
- EERE is in the process of consolidating multiple IT systems in order to establish a single Enterprise IT solution for core business functions, including grants management. This new system will provide EERE project managers with innovative tools for managing and evaluating projects, including their technical progress, budgets, and schedules.
- EERE is in the process of establishing a uniform set of terms and conditions for funding opportunities and awards, which will facilitate active project management. EERE will use cooperative agreements for most of its future projects, which will allow greater oversight of project activities. EERE will also establish annual go/no go milestones for every project, which will facilitate the modification or termination of underperforming projects.
- EERE is strengthening and centralizing its review of project invoices.
- EERE is increasing its engagement with recipients. Federal project managers will hold meetings (by telephone or webinar) at least once per quarter with every recipient and review the project's technical progress, budget, and schedule.
- EERE is increasing the frequency of site visits. Federal project managers will visit most projects at least once per year. Larger projects will be subject to greater scrutiny. Federal project managers will visit larger projects at least twice per year, and independent firms may be retained to conduct additional audits.

Specific responses to IG recommendations are provided below.

Appendix 3 (continued)

EEER Response to the Audit Report Recommendations

RECOMMENDATION #1: "Enhance monitoring procedures, as appropriate, to help ensure that goals and objectives of the Manufacturing Initiative are achieved in the most effective manner."

MANAGEMENT RESPONSE: CONCUR. As described above, EERE has increased its scrutiny of quarterly project reports, provided LG Chem Michigan Inc. with additional guidance on compliance with Federal reporting requirements, and required LG Chem Michigan Inc. to submit an updated project budget and project management plan in order to validate the project cost and schedule. Separately, EERE is developing and implementing a wide range of measures, including new processes and systems, to strengthen its grants management.

RECOMMENDATION #2: "Utilize the full range of remedial actions available to the government under the terms of the grant to hold LG Chem accountable for the outcome of the Holland, MI Project."

MANAGEMENT RESPONSE: CONCUR. EERE will continue to enforce the terms and conditions of the grant and hold LG Chem Michigan Inc. accountable for any failures to comply therewith.

RECOMMENDATION #3: "Enforce the terms of the grant award, as appropriate, to ensure that LG Chem either transitions production of battery cells to the Michigan plant or implements some alternative use for the facility."

MANAGEMENT RESPONSE: PARTIAL CONCUR. EERE will continue to enforce the terms and conditions of the grant and hold LG Chem Michigan Inc. accountable for any failures to comply therewith. For example, EERE will enforce compliance with 10 C.F.R. 600.321, which governs the disposition of project property and equipment. EERE's award requirements are based on the American Recovery and Reinvestment Act of 2009, OMB's "Initial Implementing Guidance for the American Reinvestment Act of 2009," and Federal financial assistance regulations.

DOE's investment in this battery manufacturing facility is helping to put Michigan and the United States in a prime position to capture a rapidly growing global market. This is part of an overall effort to make sure that America's auto manufacturing base continues to adapt to the most innovative technologies and deliver the gasoline saving vehicles that consumers increasingly want. Our grant is designed to provide this capacity to Michigan.

DOE does not concur that the grant terms for this grant can be used to force LG Chem Michigan Inc. to transition production of battery cells from South Korea to the Michigan plant. DOE does not have authority to dictate the production decisions of LG Chem Michigan Inc., which are based on the market.

RECOMMENDATION #4: "Conduct a review of questioned costs identified in our report and determine whether the costs were allowable and reasonable."

MANAGEMENT RESPONSE: CONCUR. EERE, in conjunction with the contracting officer, conducted a review of the questioned labor costs. EERE concurs with the IG finding of unallowable costs in the amount of \$1,684,377, of which the EERE share was \$442,189. EERE, through the contracting officer, took action to disallow these project costs on December 18, 2012. *EERE will achieve full recovery of these labor costs* – EERE is requiring LG Chem Michigan Inc. to repay all \$442,189, and LG Chem Michigan Inc. has agreed to do so.

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